



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/837,847	04/18/2001	Takao Nirasawa	09792909-4995	9131

26263 7590 08/24/2004

SONNENSCHN NATH & ROSENTHAL LLP  
P.O. BOX 061080  
WACKER DRIVE STATION, SEARS TOWER  
CHICAGO, IL 60606-1080

EXAMINER
----------

CANTELMO, GREGG

ART UNIT	PAPER NUMBER
----------	--------------

1745

DATE MAILED: 08/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/837,847

Applicant(s)

NIRASAWA ET AL.

Examiner

Gregg Cantelmo

Art Unit

1745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 03 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,4,5,9-11 and 13-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 13-21 is/are rejected.
- 7) ☒ Claim(s) 1,4,5 and 9-11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 3, 2004 has been entered.

### ***Response to Amendment***

2. In response to the amendment received August 3, 2004:
- a. Claims 2, 3, 6-8, and 12 have been cancelled. Claims 1, 4, 5, 9-11 and 13- 21 are pending;
  - b. The prior art rejections of record have been withdrawn in light of the amendments to the instant claims.

### ***Claim Objections***

3. Claim 1 is objected to because of the following informalities: the last two lines of claim 1 should be amended as follows:

... the nonaqueous electrolyte contains a thioacetate in a range from 0.03 to 10 percent by weight of the electrolyte --.

This would clearly define the relationship as disclosed in the instant application. Applicant is directed to page 5, lines 15-17 and the paragraph bridging pages 6 and 7) which was used as a template by the Examiner to grammatically reword claim 1. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claim 13 is rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the electrolyte being selected from the group consisting of thioacetates defined therein does not reasonably provide enablement for an electrolyte being a mixture of two or more of these thioacetates. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims.

The original disclosure does not teach or suggest with sufficient specificity of the electrolyte combinations of plural thioacetates.

6. Claims 14-21 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the electrolyte being selected from the group consisting of thioacetates, thiols, thiophenes, thioanisols, thiazoles, thioacetates and aromatic sulfones, does not reasonably provide enablement for an electrolyte of thioacetate as defined in claim 1 in combination with the additional electrolytes of claims

14-21. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims.

The original disclosure does not teach or suggest with sufficient specificity of the electrolyte combinations of a thioacetate (as required in claim 1) with the thiols, thiophenes, thioanisols, thiazoles, thioacetates and aromatic sulfones.

7. Claim 13 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The original disclosure does not teach or suggest with sufficient specificity of the electrolyte combinations of plural thioacetates and therefore constitutes new matter.

8. Claims 14-21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The electrolyte combinations defined therein with a thioacetate and further one of thiols, thiophenes, thioanisols, thiazoles, thioacetates and aromatic sulfones as required in respective claims 14-21 is not supported by the original disclosure and constitutes new matter.

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 13-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

11. Regarding claims 13-21, the phrase "and derivatives thereof" renders the claims indefinite because the claims include elements not actually disclosed (those encompassed by "and derivatives thereof"), thereby rendering the scope of the claims unascertainable. See MPEP j 2173.05(d). The specification does not clearly define Prosecution history will show that this issue has previously been presented to Applicant's representative (see item 6 of the office action mailed December 2, 2002, incorporated herein). One of ordinary skill in the art would not have had sufficient teachings from the original disclosure as to what the instant application appreciated as suitable derivatives used in the claimed invention. Therefore the term is indefinite.

#### ***Allowable Subject Matter***

12. Claims 1, 4, 5, and 9-11 would be allowable if rewritten or amended to overcome the claim objection set forth in this Office action.

13. The following is a statement of reasons for the indication of allowable subject matter: none of the prior art of record teaches, suggest or render obvious the invention of claim 1.

EP '258 does not teach of the electrolyte consisting of a thioacetate as recited in claim 1 in the percentage weight set forth therein.

Hamamoto teaches of a thiol additive but does not teach with sufficient clarity to the nonaqueous electrolyte of claim 1 comprising 0.03 to 10 percent by weight of a thioacetate

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregg Cantelmo whose telephone number is (571) 272-1283. The examiner can normally be reached on Monday to Thursday from 9 a.m. to 6 p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pat Ryan, can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. FAXES received after 4 p.m. will not be processed until the following business day. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you

Application/Control Number: 09/837,847

Page 7

Art Unit: 1745

have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Gregg Cantelmo  
Primary Examiner  
Art Unit 1745

gc

A handwritten signature in black ink, appearing to read "Gregg Cantelmo", written in a cursive style.

August 20, 2004